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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,854	12/22/2003	Kunitake Matsushita	31647-5	9104

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EXAMINER

MULLINS, BURTON S

ART UNIT PAPER NUMBER

2834

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,854

Applicant(s)

MATSUSHITA ET AL.

Examiner

Burton S. Mullins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 6-11 is/are rejected.
- 7) ☒ Claim(s) 2,4 and 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 22 December 2003 has been considered by the examiner.

Claim Objections

3. Claims 3 and 7 are objected to because of the following informalities: In claim 3, change "by way of a ball rotatably provided" to --by means of a rotatable ball--. In claim 4, delete "being". In claim 7, change "holing" to --holding--. Appropriate correction is required.

Drawings

4. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Toye (US 6,603,229). Toye teaches a motor comprising: a rotor 34 including a shaft (not numbered; Fig.1) and a magnet 36 surrounding a portion of the shaft; a stator 45 surrounding the magnet of the rotor with a gap therebetween (not numbered, Fig.2), and adapted to generate a magnetic field thereby causing the rotor to rotate around an axis of the shaft (inherent); a rotor sleeve having a cylindrical portion (not numbered, Fig.1) and a flange (not numbered, Fig.1) provided at one end of the cylindrical portion, the rotor sleeve being provided between the magnet and the shaft so as to fixedly hold the magnet and the shaft together (Fig.2); a boss (end bell) 30 having a circular shape with a center hole 50 for allowing the shaft to rotatably pass therethrough (Fig.1), and being fixedly attached to the stator 45 so as to oppose the flange of the rotor sleeve (Fig.2); and a plurality of bearing balls 38 rotatably disposed between the boss and flange of the rotor sleeve (Fig.2).

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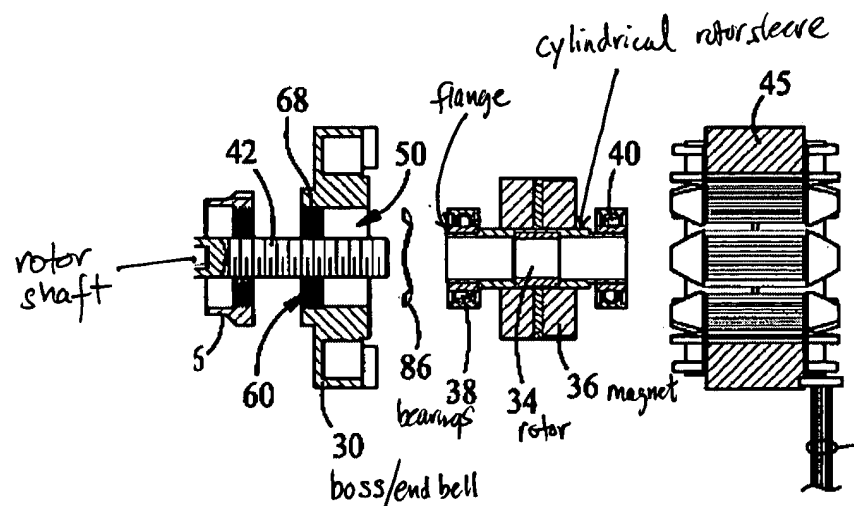


FIG. 1

Regarding claim 6, note sleeve bearing 80 (Figs.1&2).

Regarding claim 8, one exposed end 42 of the shaft comprises a threaded, spiral portion (Fig.2).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toye in view of Nagata et al. (JP 07-075322). Toye substantially teaches applicant's invention but does not specifically teach a thrust spring. Nagata teaches a thrust spring 16 for reducing shaft

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vibration (Figs. 1&3). It would have been obvious to provide a thrust spring per Nagata on Toye's device to reduce shaft vibration.

9. Claims 7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toye in view of Kiyoshi et al. (JP 8-118371). Toye substantially teaches applicant's invention but does not specifically teach methods of manufacture including: filling resin between the magnet and shaft (claim 7) and on the spiral ridge contemporaneously (claims 9-10) or integrally molding the boss and stator (claim 11). Kiyoshi teaches lead screw molding methods including simultaneously molding the spiral ridge 8 with the resin 3 and the magnets 16 (specification pp. 1-2) to improve manufacture by saving labor and expense (abstract). It would have been obvious to provide a manufacture per Kiyoshi of Toye's device to improve manufacture by saving labor and expense.

Allowable Subject Matter

10. Claims 2 and 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach the claimed motor including: an inner surface of the boss beveled to form a conical configuration with a diameter increasing from the center hole of the boss (claim 2); plural partitioning protrusions formed on the flange (claim 4); or plural partitioning protrusions formed on an inner surface of the boss (claim 5).

Conclusion

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11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029.

The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
30 November 2004